LOS ANGELES COUNTY WATERWORKS DISTRICTS

2002 Annual Water Quality Report

LOS ANGELES COUNTY WATERWORKS DISTRICT NO. 21, KAGEL CANYON

DEAR CUSTOMER:

The Los Angeles County Waterworks Districts are pleased to provide you with our 2002 Annual Water Quality Report. We are committed to serving you high quality water that meets State and Federal standards. Our on-going efforts include increasing the capacity and reliability of the water system and ensuring the quality of our water supply through rigorous water quality testing.

In order to provide you with a better understanding of the quality of your drinking water, this report includes information about where your water comes from, how your water is treated, source water assessments, what contaminants can be found in your water, results from our water quality testing, and general information about your drinking water.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien

WHAT IS THE SOURCE OF YOUR WATER AND HOW IS IT TREATED?

During 2002, approximately 62 percent of the water served in the District consisted of treated surface water and the remaining 38 percent was supplied by groundwater. The District purchases its treated surface water from the City of Los Angeles, Department of Water and Power (LADWP). In addition, the District extracts groundwater from three wells located in Kagel Canyon.

Our surface water supply is treated by LADWP at their Los Angeles Aqueduct Filtration Plant. LADWP treats its source water by using conventional treatment methods, which include coagulation, flocculation, sedimentation and filtration. LADWP uses chlorine for disinfection because of its ability to kill microorganisms, such as bacteria, in the water and reduce the potential for their regrowth in the distribution pipes. Chlorine is also added to our groundwater before it is blended with the treated surface water in the distribution pipes.

HOW DO WE MONITOR THE QUALITY OF YOUR WATER?

To ensure that water is safe to drink, the United States Environmental Protection Agency (USEPA) and the State Department of Health Services (DHS) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

To meet these standards, the District has contracted a State-certified laboratory to conduct all analyses. Analyses in the Region were performed on water samples taken from the wells and from the distribution system. The District's wells were tested for chemical, physical, radioactive, and bacteriological parameters as required by Federal and State regulations. We also tested for additional organic and inorganic chemicals that are not yet regulated.

In addition to source testing, we monitor the water quality throughout the distribution system. Several key locations within the distribution system have been selected for this purpose. Every week, each location is tested for bacteria, color, turbidity, odor, and disinfectant level to assure that our customers receive safe and high quality drinking water. All tests are conducted in a State-certified laboratory using federally approved testing methods. Our contracted laboratory is equipped with state-of-the-art instruments capable of detecting contaminants at very minute quantities.

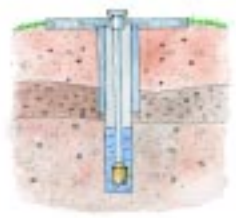
PUBLIC PARTICIPATION AND CONTACT INFORMATION

The regular meetings of the Los Angeles County Board of Supervisors are held every Tuesday at 9:30 a.m. in the Board's Hearing Room located at 500 West Temple Street, Room 381B, Kenneth Hahn Hall of Administration in Los Angeles. The regular meeting of the Board held on the fourth Tuesday of each month is primarily for the purpose of conducting legally required public hearings on zoning matters, fee increases, special district proceedings, property transactions, etc. On Tuesdays following a Monday holiday the meetings begin at 1:00 p.m.

The Los Angeles County Waterworks Districts welcome your comments and participation in the preparation of our Annual Water Quality Report. For questions or comments regarding water quality or this report please contact Mr. Mark Carney at (310) 456-6770 Ext. 242 or Mr. Sami Kabar at (626) 300-3339.

To view this report on the internet please visit our website at *www.ladpw.org*

SOURCE WATER ASSESSMENT



A source water assessment was conducted for Wells 21-1, 21-2, and 21-5 in the Los Angeles County Waterworks District No. 21 - Kagel Canyon, water system in March 2002.

These sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Vulnerable Well	Possible Contaminating Activities
21-1	Above ground storage tanks High density housing Managed forest Water supply well
21-2	High density housing Managed forest Water supply well
21-5	Managed forest

A copy of the complete assessment may be viewed at: DHS Los Angeles District Office, 1449 West Temple Street Room 202, Los Angeles CA, 90026, or by contacting Mr. Joseph Crisologo at (213) 580-5723.

WHAT CONTAMINANTS MAY BE PRESENT IN WATER?

The sources of drinking water (both tap water and bottle water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over land surface or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential use.
Organic chemical contaminants, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic tanks.
Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure tap water is safe to drink, USEPA and DHS prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that provide the same protection for public health.
Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (1-800-426-4791).

TERMS AND ABBREVIATIONS USED IN WATER QUALITY DATA TABLE

Maximum Contaminant Level (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs as is economically or technologically feasible.
Maximum Contaminant Level Goal (MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the EPA.
Public Health Goal (PHG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.
Maximum Residual Disinfectant Level (MRDL) is the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.
Maximum Residual Disinfectant Level Goal (MRDLG) is the level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set the U.S. Enviornmental Protection Agency.
Primary Drinking Water Standard (PDWS) are MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.
Regulatory Action Level (AL) is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT) is a required process intended to reduce the level of a contaminant in drinking water.
ppm = parts per million, **ppb** = parts per billion, **pCi/L** = picoCuries per liter, **SI** = Saturation Index (Langelier), **ND** = None Detected **NTU** = Nephelometric Turbidity Unit, **MFL** = Million Fibers per Liter, **umho/cm** = micromhos per centimeter, and **NS** = No Standard

WATER QUALITY DATA

The table below lists all the drinking water contaminants that we detected during the 2002 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State requires us to monitor certain contaminants less frequently than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, may be more than one year old.

PARAMETERS	GOALS		REGULATORY LEVELS		TREATED SURFACE WATER			CHLORINATED GROUNDWATER			POSSIBLE SOURCES
	MCLG	PHG	MCL	AL	MIN	MAX	AVERAGE	MIN	MAX	AVERAGE	
PRIMARY DRINKING WATER STANDARDS											
Clarity (Turbidity)											
Surface Water (NTU)	NS	NS	0.5	NS	0.1	0.2	0.125				Soil runoff
Ground Water (NTU)	NS	NS	NS	NS				ND	0.15	0.05	Soil runoff
Distribution Sys. (NTU)	NS	NS	5	NS	0.11	1.6	0.33	0.11	1.6	0.33	Soil runoff
Microbiological Contaminants											
Total Coliform Bacteria (# of positive samples)	0	NS	5	NS			0	0	1	0.03	Naturally present in the environment
Fecal Coliform and E. Coli (# of posititve samples)	0	NS	1	NS			0			0	Human or animal waste
Disinfection Byproducts											
Total Trihalomethanes (ppb)	NS	NS	80	NS	34	253	72	34	253	72	Byproduct of drinking water chlorination
Haloacetic acids (ppb)	NS	NS	60	NS	12	285	45	12	285	45	Byproduct of drinking water chlorination
Disinfectants											
Chlorine, Total (ppm)	NS	NS	MRDL =4	NS	1.8	2.5	2.1	1.8	2.5	2.1	Water additive used to control microbes
Inorganic Chemicals											
Aluminum (ppb)	NS	600	1000	NS	12.6	57.3	25.8			ND	Erosion of natural deposits; residue from somesurface water treatment processes
Arsenic (ppb)	NS	NS	50	NS	2.2	7.6	4.6			ND	Erosion of natural deposits
Barium (ppm)	2	NS	1	NS	ND	0.037	0.026			ND	Erosion of natural deposits; discharge from oil drilling wastes and metal refineries
Chromium, Total (ppb)	100	NS	50	NS			ND	ND	2.4	0.53	Erosion of natural deposits; discharge from steel and pulp mills and chrome plating
Copper (ppb)	NS	170	NS	1300	7.1	12.6	9.8			ND	Erosion of natural deposits; corrosion of household plumbing
Fluoride (ppb)	NS	1	2	NS	0.75	0.85	0.81	ND	0.19	0.06	Erosion of natural deposits; water additive to promote strong teeth
Nitrate as NO_3 (ppm)	NS	45	45	NS	1.48	2.23	1.77	14.8	22.05	17.34	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage
Radioactivity											
Gross Alpha (pCI/L)	NS	NS	15	NS	1.98	4.63	3.36			ND	Erosion of natural deposits
Gross beta (pCI/L)	NS	NS	50	NS	2.4	8.58	5.08			ND	Decay of natural and manmade deposits
T. Strontium 90 (pCI/L)	NS	NS	8	NS	0.17	0.28	0.207			ND	Decay of natural and manmade deposits
T. Tritium (pCI/L)	NS	NS	20000	NS	ND	223	115.97			ND	Decay of natural and manmade deposits
UNREGULATED CONTAMINANTS											
Boron (ppm)	NS	NS	NS	1000	0.21	0.21	0.21	13	76	37.32	Erosion of natural deposits; industrial and agricultural discharges
Chromium 6 (ppb)	NS	NS	NS	NS	0.6	0.6	0.6	1.34	2.82	1.8	Erosion of natural deposits; industrial waste discharges
Vanadium (ppb)	NS	NS	NS	50	ND	3.3	ND	8.72	17.76	15.97	Erosion of natural deposits; burning of fuels
SECONDARY DRINKING WATER STANDARDS											
Chloride (ppm)	NS	NS	500	NS	50	77.4	61.03	ND	24.9	8.81	Runoff/leaching from natural deposits
Color (color units)	NS	NS	15	NS	2	4	2.75	ND	24.6	8.77	Natural occuring organic materials
Iron (ppb)	NS	NS	300	NS	0.2	0.6	0.44			ND	Leaching from natural deposits; industrial wastes
Manganese (ppb)	NS	NS	50	NS	8.47	13.4	10.72			ND	Leaching from natural deposits
Odor-threshold (units)	NS	NS	3	NS			ND			ND	Naturally occurring organic chemicals
Specific Conductance (umhos/cm)	NS	NS	1600	NS	439	524	480	ND	568	201.6	Substances that form ions when in water; seawater intrusion
Sulfate (ppm)	NS	NS	500	NS	34.4	45.3	42.35	ND	42	13.9	Runoff/leaching from natural deposits; industrial wastes
Total dissolved solids (ppm)	NS	NS	1000	NS	254	330	298	ND	374	127.5	Runoff/leaching from natural deposits
ADDITIONAL CONSTITUENTS OF INTEREST											
Bicarbonate Alkalinity (ppm)	NS	NS	NS	NS	109	135	122	129	246	168	Leaching from natural deposits
Calcium (ppm)	NS	NS	NS	NS	24.6	29.9	26.9	26.1	64.1	38.3	Leaching from natural deposits
Corrosivity (Langelier Index)	NS	NS	NS	NS			Non-corrosive			Non-corrosive	Leaching from natural deposits
pH (pH Units)	NS	NS	NS	NS	7.48	8.1	7.76	7.14	8.21	7.68	Natural acidity/alkalinity of water
Potassium (ppm)	NS	NS	NS	NS	2.62	4.21	3.39	1.22	4.53	2.32	Leaching from natural deposits
Sodium (ppm)	NS	NS	NS	NS	58.2	61.3	60.2	32.5	35.1	34.2	Leaching from natural deposits
Total Alkalinity	NS	NS	NS	NS	89	111	100	106	201	138	Leaching from natural deposits
Total Hardness as $CaCO_3$ (ppm)	NS	NS	NS	NS	90.1	112	104.28	80	238	123	Leaching from natural deposits

THE QUALITY OF YOUR WATER

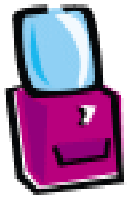
Lead and Copper: During 2002, we conducted lead and copper sampling from several high-risk homes in the District as required by DHS. The 90th percentile result for copper was 0.609 milligrams per liter and below detectable levels for lead. The next round of lead and copper monitoring is scheduled for 2005.

Cryptosporidium: Cryptosporidium is a microscopic organism that causes a gastro-intestinal disease called cryptosporidiosis which may cause diarrhea, headache, abdominal cramps, nausea, vomiting, and low grade fever. The infectious microorganism can be transmitted through ingestion of contaminated food, drinking water, or by direct contact with the fecal matter of infected persons or animals.

The chance of its presence in the water supply is extremely small because it is being monitored on a regular basis and very low levels hundreds of times lower than those reported in other parts of the Country have been detected in untreated water. Multiple-barrier treatment which includes coagulation, flocculation, filtration, and disinfection at LADWP treatment plants further minimize the chance of its presence in treated water.

While the general public is at a very low risk of contracting Cryptosporidium, immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/ AIDS, or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risks of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

BOTTLED WATER, HOME TREATMENT DEVICES, AND SOFTENERS



Bottled water need not be purchased for health reasons, since tap water meets the Federal and State drinking water standards. If taste is an issue, bottled water might be the answer, but keep in mind that it is over 1,000 times more expensive than tap water.

Installation of a home treatment unit is a personal matter. The devices are not required to make the water meet the Federal and State drinking water standards. In fact, if not properly maintained, these devices may actually cause water quality problems. However, some people are concerned about the taste of their drinking water. If taste is an issue, then a home treatment unit might be appropriate. It is important to keep in mind that all units require maintenance and should be bought from a reputable dealer. They should also be tested and validated against accepted performance standards like those used by the National Sanitary Foundation (NSF).

Hardness in drinking water is caused by two non-toxic minerals: calcium and magnesium. Hard water reduces the amount of lather or suds produced by soap. Hard water also tends to leave deposits such as a ring in the bathtub, scale on cooking pots and coffee makers, and spots on glassware. At a hardness level above 120 milligrams per liter, a water softener might be considered to reduce deposits in the hot water system and to make washing easier.

Water softeners generally replace the non-toxic hardness minerals in the water with sodium. Although the amount of sodium produced is relatively insignificant in comparison to the sodium found in food, people with sodium restricted diets should consult their doctor or install a softener for their hot water supply only.

WATER CONSERVATION INFORMATION

Much of your water is imported from Northern California. We live in an arid climate and should continue to look for ways to reduce our water consumption while meeting critical indoor water needs, and maintaining aesthetically pleasing outdoor landscaping.

Since about two-thirds of the residential water use is for landscape watering, this is the area of domestic water use where conservation can be most effective. Knowing how much and when to water are the main factors to promote a healthy lawn while conserving water. Water demand is in turn dependent upon the grass species and climate. Making sure your irrigation system is free of leaks and providing a uniform application of water are key to being water wise and maintaining an attractive lawn.

For questions or comments regarding water conservation, Please cotact Mr. Ramy Gindi at (626) 300-3357